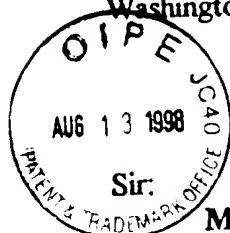


# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents  
Washington, DC 20231



## REVOCATION OF PRIOR POWERS OF ATTORNEY AND APPOINTMENT OF NEW POWER OF ATTORNEY

Sir:  
Massachusetts Institute of Technology, the Assignee of certain rights, titles and interest in the patent applications listed below by virtue of Assignment documents of record in the Patent Office, hereby revokes all previous powers of attorney with respect to these patent applications heretofore granted and appoints the following attorneys with full power of substitution and revocation to prosecute applications and transact all business in the U.S. Patent and Trademark Office connected therewith:

Donald W. Muirhead	Reg. No. 33,978	Charles H. Cella	Reg. No. 38,099
Beth E. Arnold	Reg. No. 35,430	John C. Gorecki	Reg. No. 38,471
Matthew P. Vincent	Reg. No. 36,709	Edward J. Kelly	Reg. No. 38,936
Isabelle M. Clauss	Reg. No. (see attached)	Sayoko Blodgett-Ford	Reg. No. 40,516

all of the Patent Group of Foley, Hoag & Eliot LLP at One Post Office Square, Boston, MA 02109.

APPLICANTS	SERIAL NO.	TITLE	FILING DATE
Baltimore, et al.	08/418,266	Nuclear Factors Associated with Transcriptional Regulation	06 April 1995
Baltimore, et al.	08/463,397	Nuclear Factors Associated with Transcriptional Regulation	05 June 1995
Baltimore, et al.	08/464,364	Nuclear Factors Associated with Transcriptional Regulation	05 June 1995
Pomerantz, et al.	08/366,083	Chimeric Transcription Factors	29 Dec. 1994
Sen, R. and Baltimore, D.	946,365	Method of Inducible Gene Expression	23 Dec. 1986
Baeurle, P. and Baltimore, D.	07/162,680	Activation of NF- $\kappa$ B Precursor	01 March 1988
Baeurle, P. and Baltimore, D.	07/318,901	Activation of NF- $\kappa$ B Precursor	03 March 1989
Lenardo, et al.	07/341,436	NF- $\kappa$ B - Mediated Transcriptional Regulation	21 April 1989

The undersigned, whose title is supplied below, is empowered to sign this Revocation and New Power of Attorney on behalf of the Assignee. The original copy of this Revocation and New Power of Attorney is being filed in U.S. Patent Application No. 08/418,266.

Dated: Oct 30, 1997

JARMILA Z. HRBEK

PRINT OR TYPE NAME OF PERSON SIGNING

Patent Administrator and  
TITLE office Manager

**CERTIFICATE UNDER 37 C.F.R. 3.73(b)**Applicant: Joel L. Pomerantz, Phillip A. Sharp and Carl O. PaboApplication No. 08/366,083Filed: 29 December 1994Entitled: In Chimeric Transcription FactorsMassachusetts Institute of Technology, a

(Name of Assignee)

University

(Type of Assignee: corporation, university, government agency, etc.)

certifies that it is:

- ☒ the assignee of the entire right, title and interest; or  
☐ an assignee of an undivided part interest

in the patent application identified above by virtue of either:

- ☐ An assignment from the inventor(s) of the patent application identified above.

OR

- ☒ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: Carl O. Pabo To: Howard Hughes Medical Institute  
The document was recorded in the Patent and Trademark Office at Reel 7455, Frame 0674, or for which a copy thereof is attached.
2. From: Joel L. Pomerantz and Phillip A. Sharp To: Massachusetts Institute of Technology  
The document was recorded in the Patent and Trademark Office at Reel 7455, Frame 0664, or for which a copy thereof is attached.
3. From: Howard Hughes Medical Institute To: Massachusetts Institute of Technology  
The document was recorded in the Patent and Trademark Office at Reel 7455, Frame 0671, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

July 6, 1998  
Date

Jarmila Z. Hrbek  
Signature

Jarmila Z. Hrbek  
Typed or printed name

Patent Administrator  
Title



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

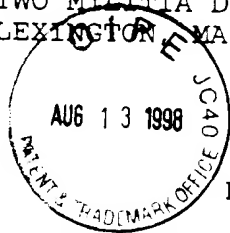
JUNE 21, 1995

PTAS

PATRICIA GRANAHAH, ESQ.  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
TWO MILITIA DRIVE  
LEXINGTON, MA 02173



\*100002907A\*



UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/28/1995

REEL/FRAME: 7455/0671

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HOWARD HUGHES MEDICAL INSTITUTE

DOC DATE: 04/18/1995

ASSIGNEE:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
77 MASSACHUSETTS AVENUE  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 08366083

FILING DATE: 12/29/1994

PATENT NUMBER:

ISSUE DATE:

JACQUELINE MOORE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

RE.

05-12-1995

SHEET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark OfficeTab settings ☐ 12 ☐ 14 ☐ 16

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ached original documents or copy thereof.

## 1. Name of conveying party(ies):

Howard Hughes Medical Institute

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_

Execution Date: April 18, 1995

## 2. Name and address of receiving party(ies)

Name: Massachusetts Institute of Technology

Internal Address: \_\_\_\_\_

Street Address: 77 Massachusetts AvenueCity: Cambridge State: MA ZIP: 02139Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 08/366,083

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Patricia Granahan, Esq.Internal Address: Hamilton, Brook, Smith &  
Reynolds, P.C.Street Address: Two Militia DriveCity: Lexington State: MA ZIP: 021736. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☒ Enclosed☐ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0380

(Attach duplicate copy of this page if paying by deposit account)

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Patricia Granahan, Esq.

Name of Person Signing

Patricia Granahan  
SignatureApril 25, 1995

Date

Total number of pages including cover sheet, attachments, and document: 3

## ASSIGNMENT

Assignment made April 18, 1995, by the Howard Hughes Medical Institute, a Delaware corporation (the "Institute") to Massachusetts Institute of Technology ("MIT").

### Recitals

WHEREAS, the Institute and MIT collaborate in the active conduct of medical research pursuant to a Statement and Agreement of Collaboration between them dated as of February 1, 1988, as amended (the "Collaboration Agreement");

WHEREAS, pursuant to the Collaboration Agreement, the Institute has agreed to assign to MIT the Institute's rights with respect to inventions, discoveries, improvements, and other intellectual property, whether patentable or copyrightable (each a "subject property"), conceived or reduced to practice in the course of the research program conducted under the Collaboration Agreement by employees of the Institute; and

WHEREAS, research conducted pursuant to the Collaboration Agreement by Dr. Carl O. Pabo while employed by the Institute at MIT has resulted in the invention of certain subject property described in a technology disclosure form dated November 4, 1994, entitled "Design of DNA-Binding Proteins with Novel Sequence Specificity" and in a patent application entitled "Chimeric Transcription Factors" dated December 29, 1994, serial no. 08/366,083 (the "Invention").

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged by the Institute, the Institute agrees as follows:

1. Assignment. The Institute hereby assigns to MIT any and all right, title, and interest of the Institute in the Invention, any United States patent applications, all corresponding foreign patent applications, and any and all patents issued therefrom, all divisions and continuations based on any of the foregoing, and all claims contained in United States and foreign continuations-in-part applications and patents which are directed to the Invention, all in accordance with and subject to the provisions of the Collaboration Agreement (including, without limitation, Section 4.3 thereof).

2. Cooperation. The Institute agrees to execute upon request such further assignments, documents, and other instruments as may be necessary or desirable fully and completely to assign the Institute's interests in the Invention to MIT and to assist MIT in applying for, obtaining, and enforcing patents, copyrights, or other rights in the United States and in any foreign country with respect to any such Invention.

HOWARD HUGHES MEDICAL INSTITUTE

By: 

W. Maxwell Cowan, M.D., Ph.D.

Vice President and Chief Scientific Officer

State of Maryland  
Montgomery County

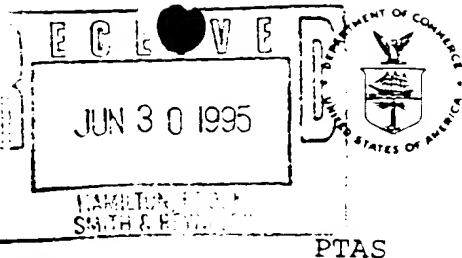
Then personally appeared before me the above-named W. MAXWELL COWAN, known to me to be the Vice President and Chief Scientific Officer of the Howard Hughes Medical Institute, and acknowledged that he executed the foregoing instrument as the free act and deed of the Howard Hughes Medical Institute, and that he was authorized to execute said instrument, this 18<sup>th</sup> day of April, 1995.

Peggy J. Simonin Notary Public

(SEAL)

Peggy J. Simonin (print name)

My Commission expires 08/10/98



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

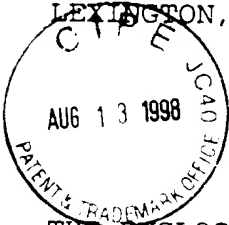
JUNE 21, 1995

PTAS

PATRICIA GRANAHAN, ESQ.  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
TWO MILITIA DRIVE  
LEXINGTON, MA 02173



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UNITED STATES PATENT AND TRADEMARK OFFICE  
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RECORDATION DATE: 04/28/1995

REEL/FRAME: 7455/0674  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

PABO, CARL O.

DOC DATE: 03/06/1995

ASSIGNEE:

HOWARD HUGHES MEDICAL INSTITUTE  
4000 JONES BRIDGE ROAD  
CHEVY CHASE, MARYLAND 20815-6789

SERIAL NUMBER: 08366083

FILING DATE: 12/29/1994  
ISSUE DATE:

PATENT NUMBER:

LAWAN FLETCHER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

05-12-1995



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U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Carl O. Pabo

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other \_\_\_\_\_Execution Date: March 6, 1995

## 2. Name and address of receiving party(ies)

Name: Howard Hughes Medical Institute

Internal Address: \_\_\_\_\_

Street Address: 4000 Jones Bridge RoadCity: Chevy Chase State: MD ZIP: 20815-6789Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 08/366,083

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Patricia Granahan, Esq.Internal Address: Hamilton, Brook, Smith &  
Reynolds, P.C.Street Address: Two Militia DriveCity: Lexington State: MA ZIP: 021736. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☒ Enclosed☐ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0380

(Attach duplicate copy of this page if paying by deposit account)

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Patricia Granahan, Esq.

Name of Person Signing

Patricia Granahan  
SignatureApril 25, 1995

Date

Total number of pages including cover sheet, attachments, and document: 3



SoleASSIGNMENT

WHEREAS, I, Carl O. Pabo (hereinafter "the Assignor") have, together with co-inventors Joel L. Pomerantz and Philip A. Sharp, invented a certain new and useful improvement in CHIMERIC TRANSCRIPTION FACTORS described in an application for Letters Patent of the United States, Serial No. 08/366,083, filed December 29, 1994.

WHEREAS, Howard Hughes Medical Institute (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 4000 Jones Bridge Road, Chevy Chase, Maryland 20815-6789 desires to acquire an interest therein in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the said invention as described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of my entire right, title and interest therein.

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of

applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal the date set forth below.

Inventor: Carl O. Pabo  
Carl O. Pabo

State/Commonwealth  
of Massachusetts  
County of Middlesex

Then personally appeared before me the above-named  
Carl O. Pabo and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this 6 day of March, 1995.

(SEAL)

William M. Toscano Notary Public  
William M. Toscano (print name)

My Commission expires \_\_ / \_\_ / \_\_

WILLIAM M. TOSCANO, NOTARY PUBLIC  
MY COMMISSION EXPIRES  
APRIL 1, 1999



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D C 20231

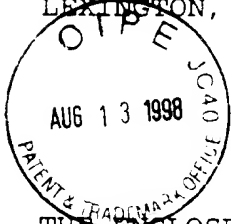
JUNE 21, 1995

PTAS

PATRICIA GRANANHAN, ESQ.  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
TWO MILITIA DRIVE  
LEXINGTON, MA 02173



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RECORDATION DATE: 04/28/1995

REEL/FRAME: 7455/0664

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

POMERANTZ, JOEL L.

DOC DATE: 03/16/1995

ASSIGNOR:

SHARP, PHILLIP A.

DOC DATE: 03/13/1995

ASSIGNEE:

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
77 MASSACHUSETTS AVENUE  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER: 08366083

FILING DATE: 12/29/1994

PATENT NUMBER:

ISSUE DATE:

DIANE RUSSELE, PARALEGAL  
ASSIGNMENT DIVISION  
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Patent and Trademark Office

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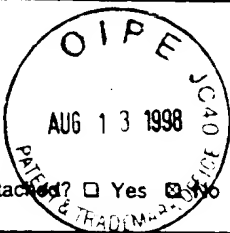
To the Honorable Commissioner of

100002935

attached original documents or copy thereof.

## 1. Name of conveying party(ies):

- (1) Joel L. Pomerantz and  
(2) Phillip A. Sharp

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 2. Name and address of receiving party(ies)

Name: Massachusetts Institute of Technology

Internal Address: \_\_\_\_\_

Street Address: 77 Massachusetts AvenueCity: Cambridge State: MA ZIP: 02139Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: (1) March 16, 1995(2) March 13, 1995

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 08/366,083

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Patricia Granahan, Esq.Internal Address: Hamilton, Brook, Smith &  
Reynolds, P.C.Street Address: Two Militia DriveCity: Lexington State: MA ZIP: 021736. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00

- ☒ Enclosed  
☐ Authorized to be charged to deposit account

## 8. Deposit account number:

08-0380

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## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*Patricia Granahan, Esq.

Name of Person Signing

Patricia Granahan

Signature

April 25, 1995

Date

Total number of pages including cover sheet, attachments, and document: 7

Joint

ASSIGNMENT

WHEREAS, we, Joel L. Pomerantz and Phillip A. Sharp (hereinafter "the Assignors"), have, together with co-inventor Carl O. Pabo, invented a certain new and useful improvement in CHIMERIC TRANSCRIPTION FACTORS described in an application for Letters Patent of the United States, Serial No. 08/366,083 filed December 29, 1994.

WHEREAS, Massachusetts Institute of Technology (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the state of Massachusetts, and having a usual place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution

of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: \_\_\_\_\_

Joel L. Pomerantz

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named Joel L. Pomerantz and acknowledged that he executed the foregoing instrument as his free act and deed this 16<sup>th</sup> day of March, 1995.

(SEAL)

Doreen M. Sorensen Notary Public  
Doreen M. Sorensen (print name)  
My Commission expires 1 / 30 / 98

Inventor: \_\_\_\_\_  
Phillip A. Sharp

State/Commonwealth

of \_\_\_\_\_

County of \_\_\_\_\_

Then personally appeared before me the above-named  
Phillip A. Sharp and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

(SEAL)

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
(print name)

My Commission expires \_\_ / \_\_ / \_\_

Joint

ASSIGNMENT

WHEREAS, we, Joel L. Pomerantz and Phillip A. Sharp (hereinafter "the Assignors"), have, together with co-inventor Carl O. Pabo, invented a certain new and useful improvement in CHIMERIC TRANSCRIPTION FACTORS described in an application for Letters Patent of the United States, Serial No. 08/366,083 filed December 29, 1994.

WHEREAS, Massachusetts Institute of Technology (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the state of Massachusetts, and having a usual place of business at 77 Massachusetts Avenue, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution



of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved.

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor: \_\_\_\_\_  
Joel L. Pomerantz

State/Commonwealth  
of \_\_\_\_\_  
County of \_\_\_\_\_

Then personally appeared before me the above-named  
Joel L. Pomerantz and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

(SEAL)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Notary Public  
(print name)  
My Commission expires \_\_ / \_\_ / \_\_

Inventor: Phillip A. Sharp  
Phillip A. Sharp

State/Commonwealth  
of Massachusetts  
County of Middlesex

Then personally appeared before me the above-named  
Phillip A. Sharp and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this 13 day of March, 1995.

(SEAL)

Jarmila Z. Hrbek Notary Public  
JARMILA Z. HRBEK (print name)  
My Commission expires 4/1/99